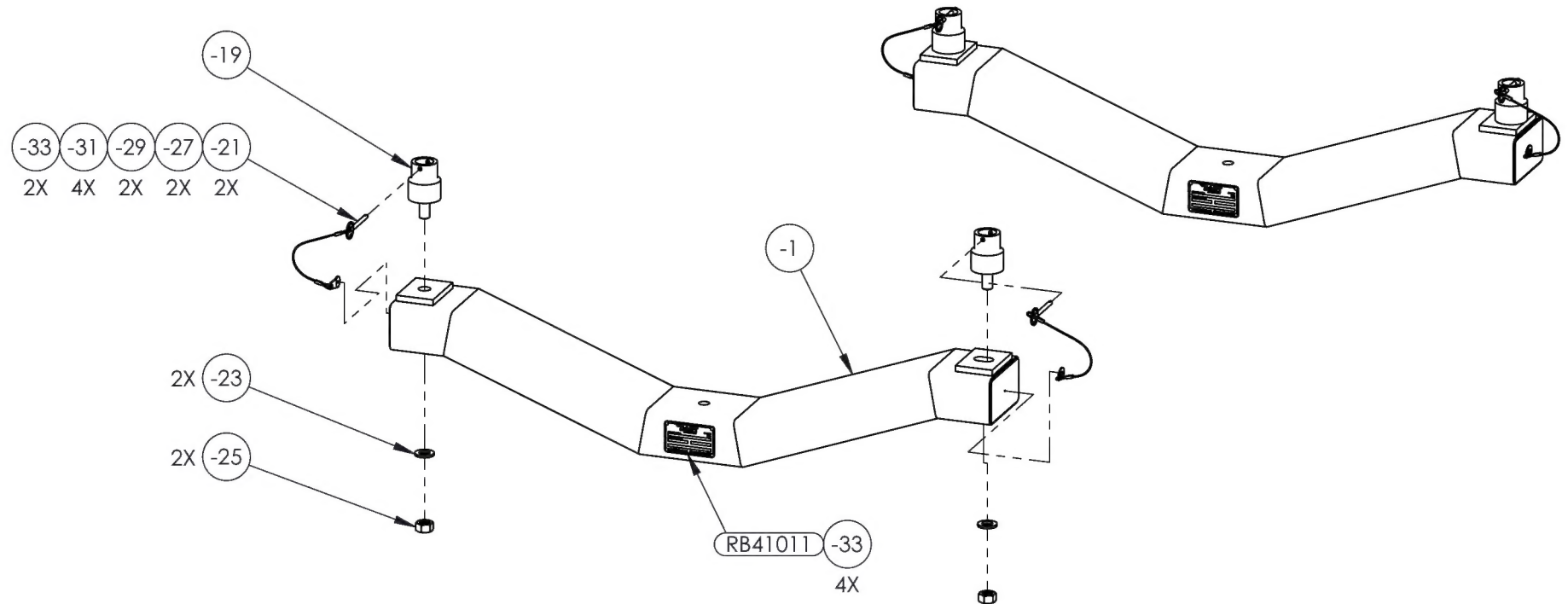


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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		RELEASED FOR PRODUCTION.	9/19/2016	DPD	JAG



ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
	X		-1	1	FRAME WELDMENT			2
	1		-3		MIDDLE TUBE	STEEL TUBE		3
	2		-5		END TUBE	STEEL TUBE		4
	2		-7		ANGLED TUBE	STEEL TUBE		5
	2		-9		END CAP	A36/1018/1020 HR		6
	1		-11		SOCKET	1018/1020 CR		7
	1		-13		THRU HOLE PLATE	A36/1018/1020 HR		8
	1		-15		SLOTTED PLATE	A36/1018/1020 HR		9
	1		-17		BALL	4140/4142		10
			-19	2	BUSHING	4140/4142		11
		B/O	-23	2	FLAT WASHER	STEEL	M16 (MCMaster-CARR #91166A310)	1
		B/O	-31	4	FERRULE	ALUMINUM	Ø1/16 X 3/8 (MCMaster-CARR #3896T31)	1
		B/O	-33	6	#2 DRIVE SCREW	COATED STEEL	#2 X 1/8 (MCMaster-CARR #90081A074)	1
		B/O	-25	2	HEX NUT	STEEL	M16 X 2 (MCMaster-CARR #90591A220)	1
		B/O	-27	2	CABLE TAB	ALUMINUM	(CARR LANE #CL-129-TAB-A)	1
		B/O	-29	2	LANYARD	COATED STEEL	Ø1/16 X 8 (CARR LANE #CL-2-C)	1
		B/O	-21	2	QUICK-RELEASE PIN	STEEL	M6 X 50mm USABLE (MCMaster-CARR #95335A536)	1
		B/O		1	DART PLACARD	ALUMINUM	RB41011	1
	ASSY -1							

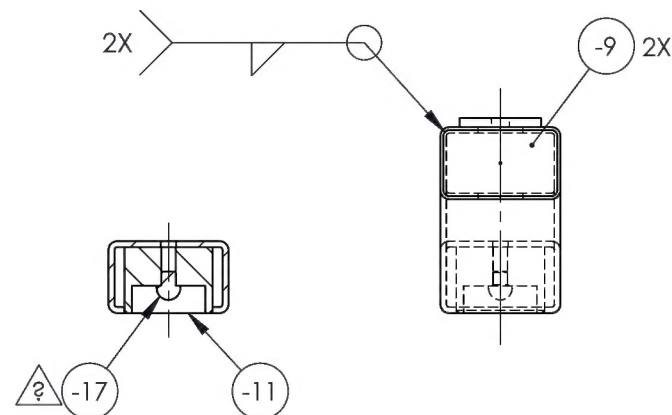
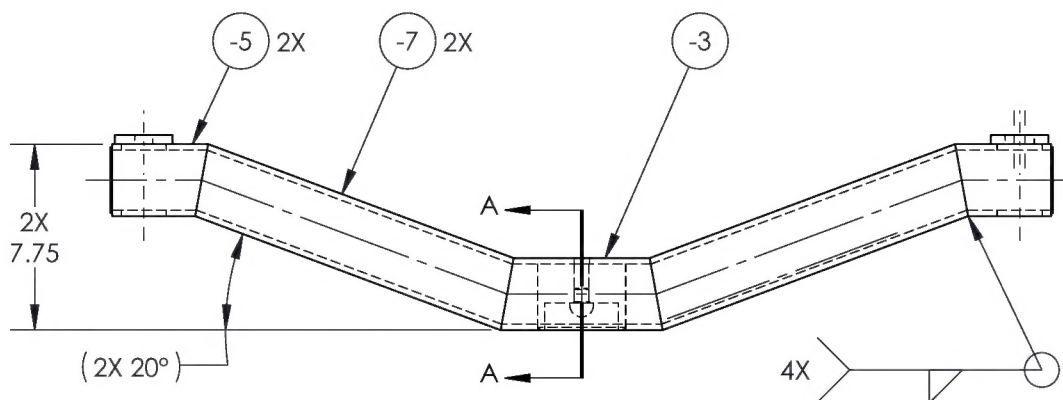
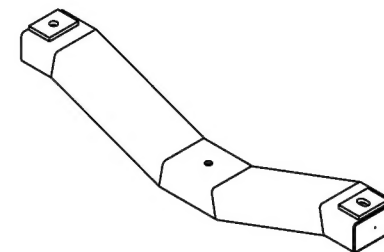
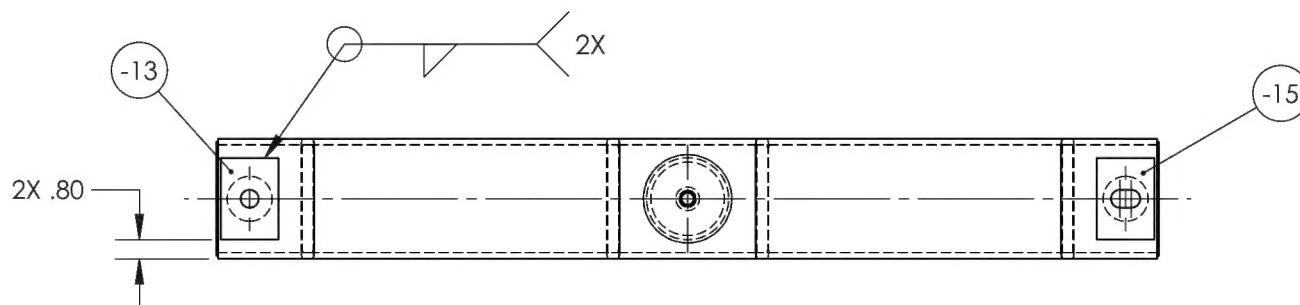
NOTE:
REF. EUROCOPTER T/N: 1121-W1.

DART
AEROSPACE

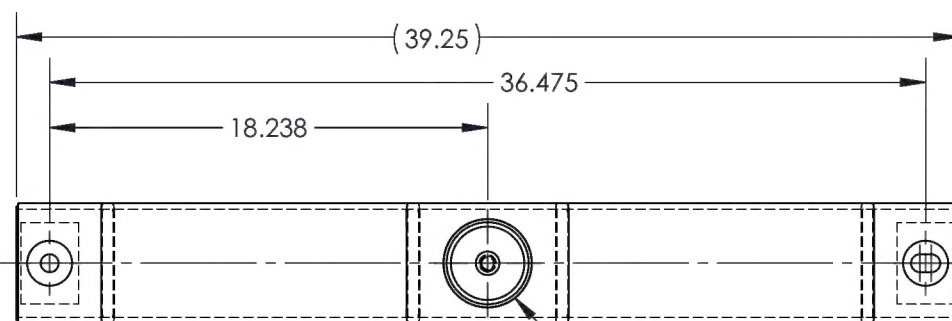
TITLE		MOVABLE BEAM	
DWG NO.		RBE1121-W1	
REV		1	
MAT'L		UNLESS OTHERWISE SPECIFIED	
TREAT		DIMENSIONS ARE IN INCHES	
FINISH		.XXX ± .005 FRACTIONS ± 1/8	
SPEC		.XX ± .01 ANGLES ± 5°	
DRAWN BY:		DUERFELDT	
CHECKED:		MACKOVJAK	
OPPS APPR:		ANDERSON	
QA APPR:		LINDSAY	
APPROVED:		GILBERT	
SCALE		1:10	
DATE		7/20/2016	
SHEET		1 OF 11	

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REV	ECR	DESCRIPTION			



SECTION A-A



FRAME WELDMENT

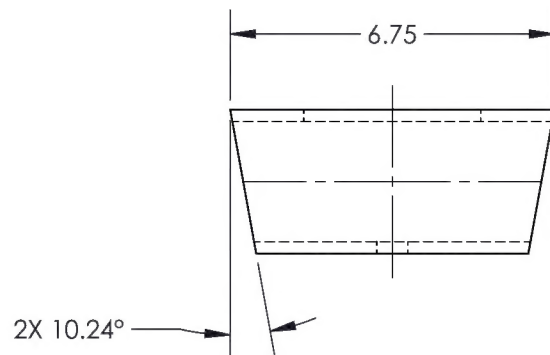
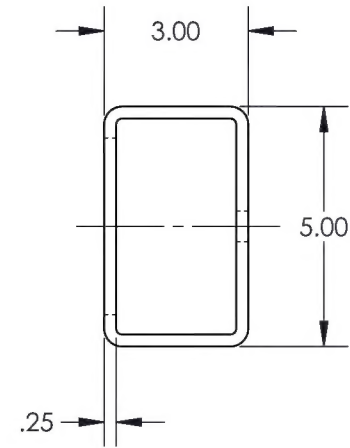
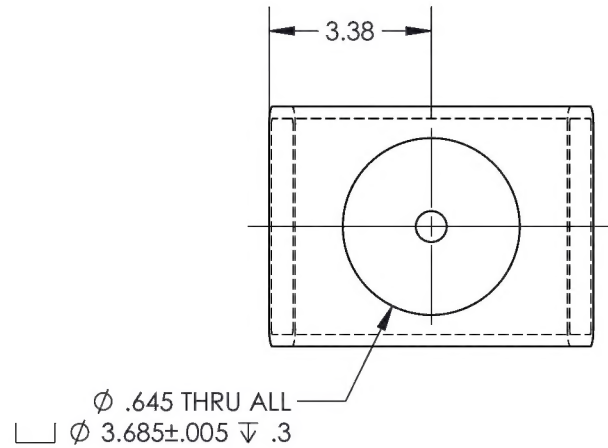
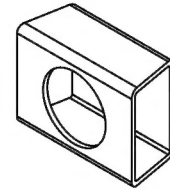
NOTE:

1. PRESS -17 BALL INTO -11 SOCKET.

DART AEROSPACE	
TITLE MOVABLE BEAM	
DWG NO. RBE1121-W1-1	REV 1
MAT'L HEAT TREAT FINISH POWDER COAT YELLOW SPEC FED #13538	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125°	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: DUERFELDT CHECKED: MACKOVJAK OPPTS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT	
USED ON MODEL EC145	
SCALE 1:8	DATE 7/20/2016
SHEET 2 OF 11	

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				APPROVED



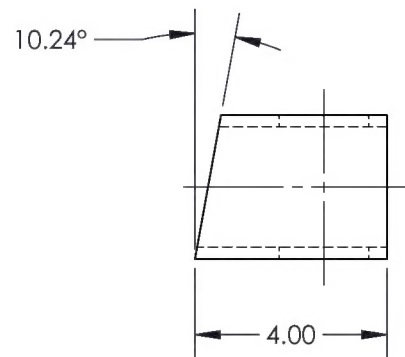
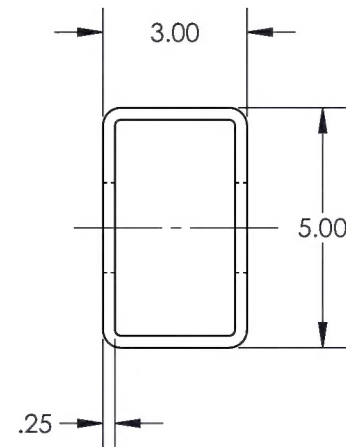
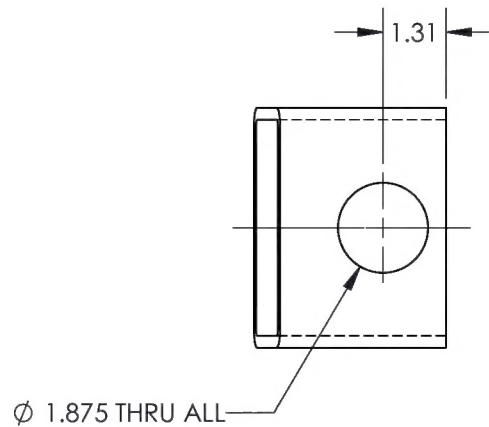
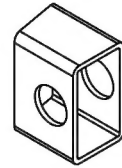
(-3)

MIDDLE TUBE

DART AEROSPACE	
TITLE MOVABLE BEAM	
DWG NO. RBE1121-W1-3	REV 1
MAT'L STEEL TUBE	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -1	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125°
DRAWN BY: DUERFELDT	1. BREAK ALL SHARP EDGES
CHECKED: MACKOVJAK	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:4	DATE 7/20/2016
	SHEET 3 OF 11

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REV	ECR	DESCRIPTION	DATE	INITIAL



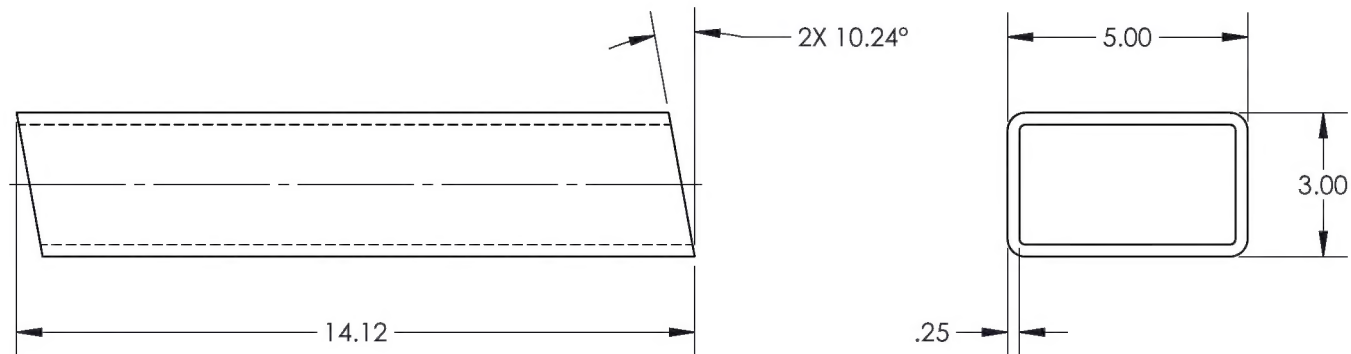
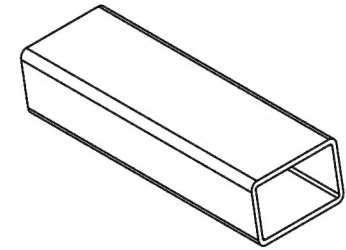
(5)

END TUBE

DART AEROSPACE																				
TITLE MOVABLE BEAM																				
DWG NO. RBE1121-W1-5	REV 1																			
<table border="1"> <tr> <td>MAT'L STEEL TUBE</td> <td rowspan="4"> UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° ✓ </td> </tr> <tr> <td>HEAT TREAT</td> </tr> <tr> <td>FINISH SEE -1</td> </tr> <tr> <td>SPEC</td> </tr> <tr> <td>DRAWN BY: DUERFELDT</td> <td>1. BREAK ALL SHARP EDGES .015 x 45° OR .015R</td> </tr> <tr> <td>CHECKED: MACKOVJAK</td> <td>2. DIMENSIONAL LIMITS APPLY AFTER PLATING</td> </tr> <tr> <td>OPPS APPR: ANDERSON</td> <td>3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009</td> </tr> <tr> <td>QA APPR: LINDSAY</td> <td>USED ON MODEL</td> </tr> <tr> <td>APPROVED: GILBERT</td> <td>EC145</td> </tr> <tr> <td>SCALE 1:4</td> <td>DATE 7/20/2016</td> </tr> <tr> <td colspan="2">SHEET 4 OF 11</td> </tr> </table>		MAT'L STEEL TUBE	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° ✓	HEAT TREAT	FINISH SEE -1	SPEC	DRAWN BY: DUERFELDT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	CHECKED: MACKOVJAK	2. DIMENSIONAL LIMITS APPLY AFTER PLATING	OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	QA APPR: LINDSAY	USED ON MODEL	APPROVED: GILBERT	EC145	SCALE 1:4	DATE 7/20/2016	SHEET 4 OF 11	
MAT'L STEEL TUBE	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 1° .X ± .1 SURFACES = 125° ✓																			
HEAT TREAT																				
FINISH SEE -1																				
SPEC																				
DRAWN BY: DUERFELDT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R																			
CHECKED: MACKOVJAK	2. DIMENSIONAL LIMITS APPLY AFTER PLATING																			
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009																			
QA APPR: LINDSAY	USED ON MODEL																			
APPROVED: GILBERT	EC145																			
SCALE 1:4	DATE 7/20/2016																			
SHEET 4 OF 11																				

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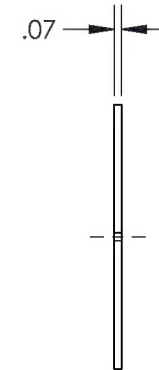
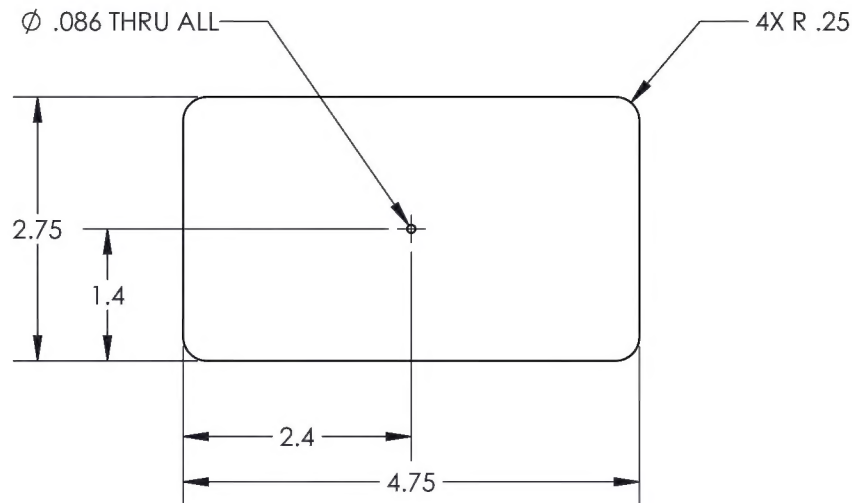
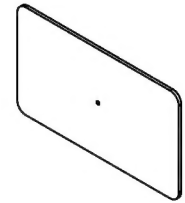


(-7)
ANGLED TUBE

DART AEROSPACE	
TITLE MOVABLE BEAM	
DWG NO. RBE1121-W1-7	REV 1
MAT'L STEEL TUBE	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -1	.XXX ± .010 FRACTIONS ± 1/8
SPEC	.XX ± .03 ANGLES ± 1°
	.X ± .1 SURFACES = 125° ✓
DRAWN BY: DUERFELDT	1. BREAK ALL SHARP EDGES
CHECKED: MACKOVJAK	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
SCALE 1:4	DATE 7/20/2016
	SHEET 5 OF 11

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				APPROVED

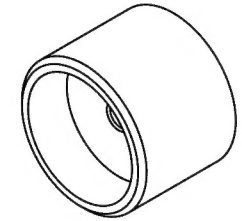
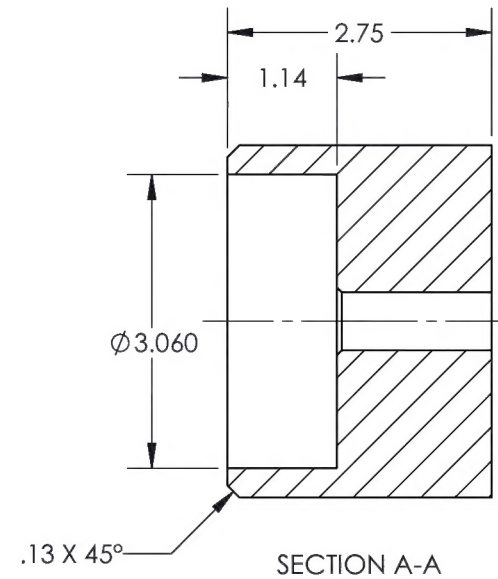
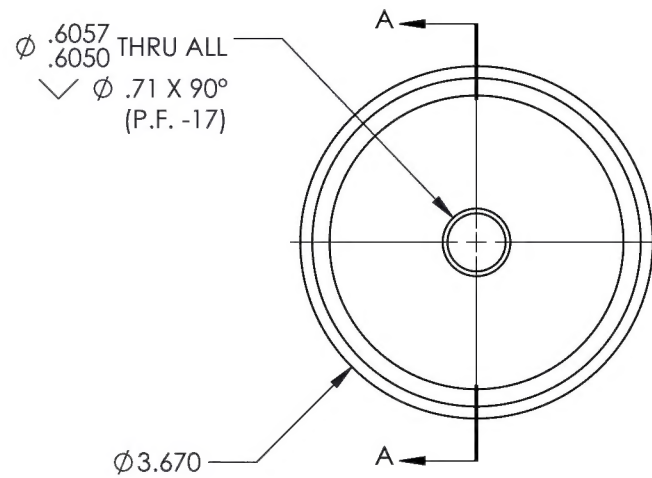


(-9)
 END CAP

TITLE MOVABLE BEAM	
DWG NO. RBE1121-W1-9	REV 1
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -1	.XXX \pm .010 FRACTIONS \pm 1/8
SPEC	.XX \pm .03 ANGLES \pm 1°
DRAWN BY: DUERFELDT	.X \pm .1 SURFACES = 125°
CHECKED: MACKOVJAK	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:2	USED ON MODEL
DATE 7/20/2016	EC145
SHEET 6 OF 11	

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				APPROVED

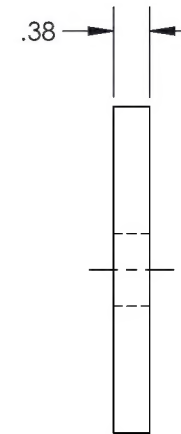
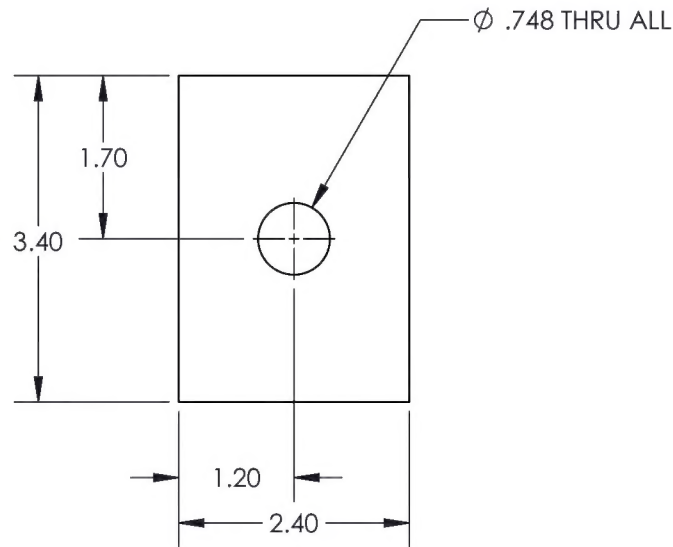
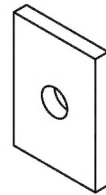


(-11)
 SOCKET

TITLE MOVABLE BEAM	
DWG NO. RBE1121-W1-11	REV 1
MAT'L 1018/1020 CR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -1	.XXX \pm .005 FRACTIONS \pm 1/8
SPEC	.XX \pm .01 ANGLES \pm .5°
DRAWN BY: DUERFELDT	.X \pm .1 SURFACES = 125 \checkmark
CHECKED: MACKOVJAK	1. BREAK ALL SHARP EDGES
OPPS APPR: ANDERSON	.015 x 45° OR .015R
QA APPR: LINDSAY	2. DIMENSIONAL LIMITS APPLY
APPROVED: GILBERT	AFTER PLATING
SCALE 1:2	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 7/20/2016	USED ON MODEL
SHEET 7 OF 11	EC145

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				APPROVED



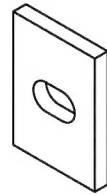
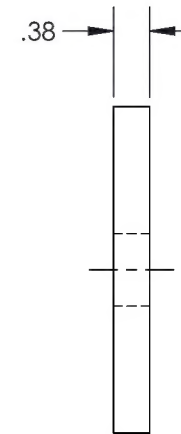
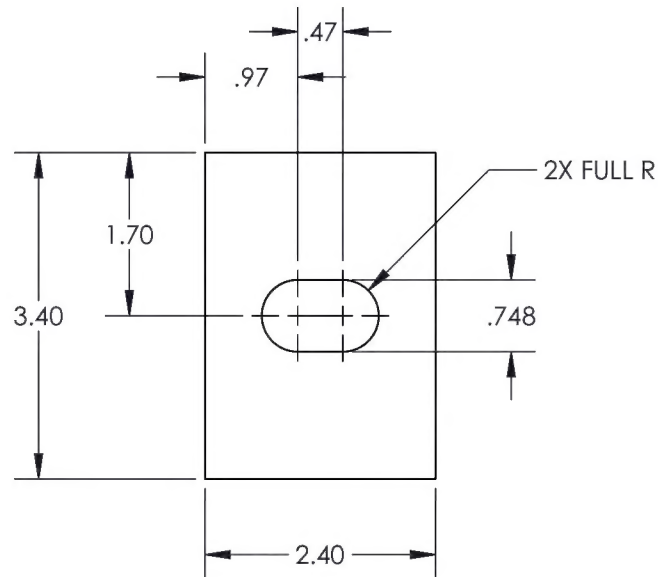
(-13)

THRU HOLE PLATE

DART AEROSPACE	
TITLE MOVABLE BEAM	
DWG NO. RBE1121-W1-13	REV 1
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -1	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
	.X ± .1 SURFACES = 125
DRAWN BY: DUERFELDT	1. BREAK ALL SHARP EDGES
CHECKED: MACKOVJAK	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
	USED ON MODEL
	EC145
SCALE 1:2	DATE 7/20/2016
	SHEET 8 OF 11

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				APPROVED



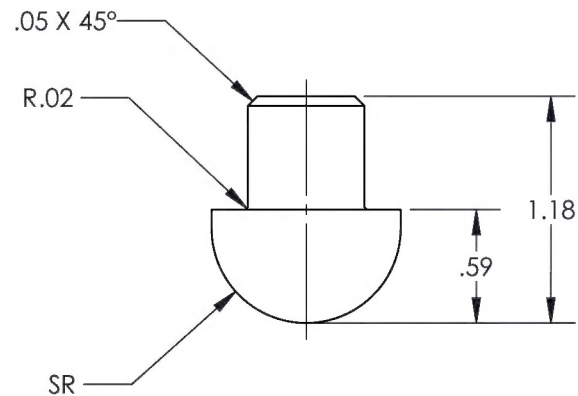
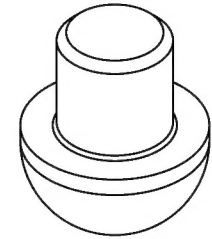
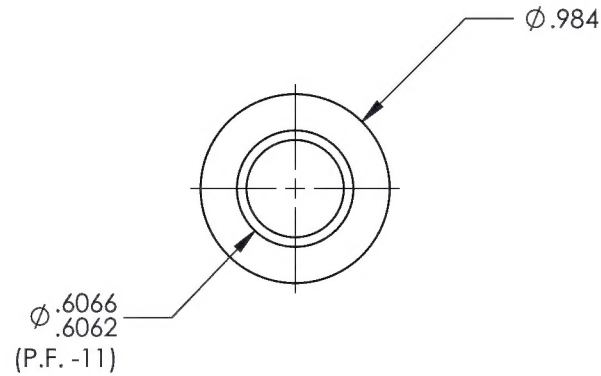
(-15)

SLOTTED PLATE

DART AEROSPACE	
TITLE MOVABLE BEAM	
DWG NO. RBE1121-W1-15	REV 1
MAT'L A36/1018/1020 HR	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -1	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
	.X ± .1 SURFACES = 125°
DRAWN BY: DUERFELDT	1. BREAK ALL SHARP EDGES
CHECKED: MACKOVJAK	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
	USED ON MODEL
	EC145
SCALE 1:2	DATE 7/20/2016
	SHEET 9 OF 11

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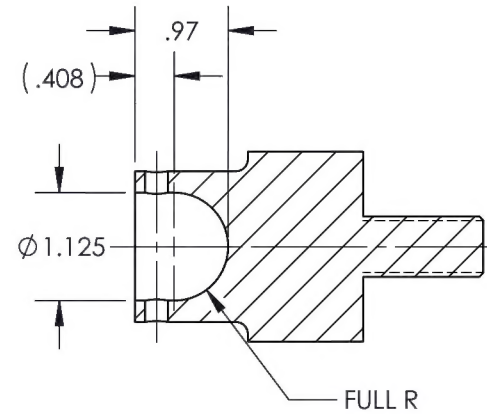
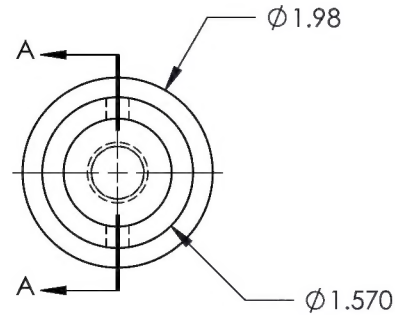
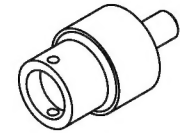
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BALL

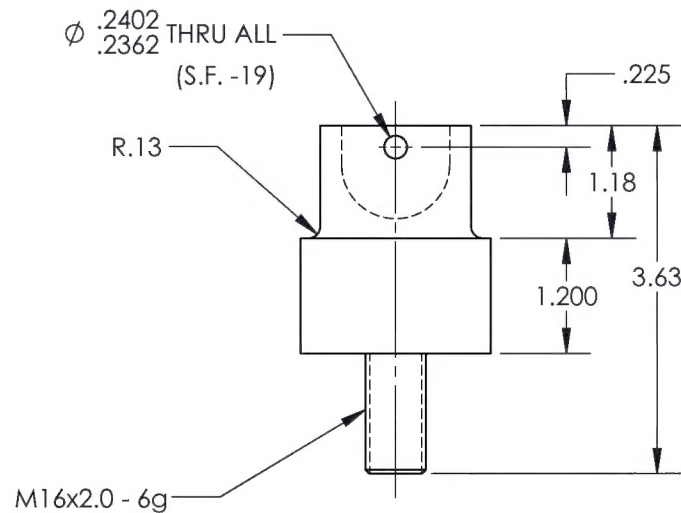
DART AEROSPACE	
TITLE MOVABLE BEAM	
DWG NO. RBE1121-W1-17	REV 1
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH SEE -1	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
	.X ± .1 SURFACES = 125° ✓
DRAWN BY: DUERFELDT	1. BREAK ALL SHARP EDGES
CHECKED: MACKOVJAK	.015 x 45° OR .015R
OPPS APPR: ANDERSON	2. DIMENSIONAL LIMITS APPLY
QA APPR: LINDSAY	AFTER PLATING
APPROVED: GILBERT	3. INTERPRET DIM AND TOL PER
	ASME Y14.5M-2009
	USED ON MODEL
	EC145
SCALE 1:1	DATE 7/20/2016
	SHEET 10 OF 11

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				APPROVED



SECTION A-A



(-19)

BUSHING

DART AEROSPACE	
TITLE MOVABLE BEAM	
DWG NO. RBE1121-W1-19	REV 1
MAT'L 4140/4142 HEAT RC 28-34 TREAT FINISH BLACK OXIDE SPEC QMSI-6.2.2, B.O. REV D	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX \pm .005 FRACTIONS \pm 1/8 .XX \pm .01 ANGLES \pm 5° .X \pm .1 SURFACES = 125°	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: DUERFELDT	USED ON MODEL
CHECKED: MACKOVJAK	EC145
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: GILBERT	
SCALE 1:2	DATE 7/20/2016
SHEET 11 OF 11	